

What is claimed is:

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1. A peptide comprising the amino acid sequence defined under SEQ ID NO:1 or an amino acid sequence derived therefrom by deletion, substitution or insertion of 1 to 5 amino acid residues (except for the amino acid sequence defined under SEQ ID NO:31 or SEQ ID NO:32), a precursor thereof, or a salt of said peptide or precursor.

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2. A peptide or precursor as claimed in Claim 1 which comprises the amino acid sequence defined under SEQ ID NO:1 or an amino acid sequence derived therefrom by deletion or substitution of 1 to 5 amino acid residues.

3. A peptide as claimed in Claim 1 which comprises the amino acid sequence defined under SEQ ID NO:1.

4. A peptide as claimed in Claim 1 which comprises the amino acid sequence defined under SEQ ID NO:2.

5. A peptide as claimed in Claim 1 which comprises the amino acid sequence defined under SEQ ID NO:3.

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6. A peptide as claimed in Claim 1 which comprises the amino acid sequence defined under any of SEQ ID NO:35 through SEQ ID NO:55.

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7. A precursor as claimed in Claim 1 which comprises the amino acid sequence defined under SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, or SEQ ID NO:7.

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8. A peptide or precursor as claimed in Claim 1 which has cortistatin-like or somatostatin-like activity.

9. A DNA comprising a DNA having a nucleotide sequence coding

10. A DNA as claimed in Claim 9 which comprises the nucleotide sequence defined under SEQ ID NO:13.

12. A DNA as claimed in Claim 9 which comprises the nucleotide sequence defined under SEQ ID NO:15.

14. A DNA as claimed in Claim 9 which comprises the nucleotide sequence defined under any of SEQ ID NO:62 through SEQ ID NO:82.

15. A recombinant vector comprising the DNA claimed in Claim 9.

16. A transformant harboring the recombinant vector claimed in Claim 15.

17. A method of producing the peptide, precursor or salt claimed in Claim 1 which comprises growing the transformant claimed in Claim 16 to thereby cause production and accumulation of the peptide, precursor or salt claimed in Claim 1 and harvesting the same.

18. A pharmaceutical composition which comprises the peptide, precursor or salt claimed in Claim 1.

19. A pharmaceutical composition comprising the DNA claimed in Claim 9.

20. A pharmaceutical composition as claimed in Claim 18 or

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July 1965

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219

19 which is an agent for the treatment or prevention of hormone-producing tumors, acromegaly, giantism, dementia or gastric ulcer, a hormone secretion inhibitor, a tumor growth inhibitor, or a neural activity or sleep modulator.

21. An antibody against the peptide, precursor or salt claimed in Claim 1.

22. A method of screening for a compound, or a salt thereof, which is capable of modifying the binding of the peptide, precursor or salt claimed in Claim 1 to a receptor to which said peptide, precursor or salt may be conjugated, or a fragment peptide of said receptor, or a salt of said receptor or fragment peptide, which method comprises, on the one hand, (i) bringing the peptide, precursor or salt claimed in Claim 1 into contact with said receptor, fragment peptide or salt to which the peptide, precursor or salt claimed in Claim 1 may be conjugated and, on the other hand, (ii) bringing the peptide, precursor or salt claimed in Claim 1 and a compound to be tested into contact with said receptor, fragment peptide or salt to which the peptide, precursor or salt claimed in Claim 1 may be conjugated, and determining and comparing the levels of binding of the peptide, precursor or salt claimed in Claim 1 to said receptor, fragment peptide or salt in and between the above cases (i) and (ii).

23. A method of screening for a compound, or a salt thereof, which is capable of modifying the binding of the peptide, precursor or salt claimed in Claim 1 to a receptor to which said peptide,

precursor or salt may be conjugated, or a fragment peptide of said receptor, or a salt of said receptor or fragment peptide, which method comprises, on the one hand, (i) bringing the peptide, precursor or salt claimed in Claim 1 into contact with cells or a cell membrane fraction containing said receptor to which the peptide, precursor or salt claimed in Claim 1 may be conjugated and, on the other hand, (ii) bringing the peptide, precursor or salt claimed in Claim 1 and a compound to be tested into contact with the cells or cell membrane fraction containing said receptor to which the peptide, precursor or salt claimed in Claim 1 may be conjugated, and (I) determining and comparing the levels of binding of the peptide, precursor or salt claimed in Claim 1 to the cells or cell membrane fraction containing said receptor or (II) determining and comparing the cell stimulating activity mediated by said receptor in and between the above cases (i) and (ii).

24. A kit for screening for a compound, or a salt thereof, which is capable of modifying the binding of the peptide, precursor or salt claimed in Claim 1 to a receptor for said peptide, precursor or salt, or a fragment peptide of said receptor, or a salt of said receptor or fragment peptide, which kit comprises the peptide, precursor or salt claimed in Claim 1.

25. A compound, or a salt thereof, which is capable of modifying the binding of the peptide, precursor or salt claimed in Claim 1 to a receptor for said peptide, precursor or salt, or a

fragment peptide of said receptor, or a salt of said receptor or fragment peptide, which has been obtained by using the screening method claimed in Claim 22 or 23 or the screening kit claimed in Claim 24.

26. A pharmaceutical composition which comprises an agonist against a receptor for the peptide, precursor or salt claimed in Claim 1 as obtained by using the screening method claimed in Claim 22 or 23 or the screening kit claimed in Claim 24.

27. A pharmaceutical composition as claimed in Claim 26 which is an agent for the treatment or prevention of hormone-producing tumors, acromegaly, gigantism, dementia or gastric ulcer, a hormone secretion inhibitor, a tumor growth inhibitor, or a neural activity or sleep modulator.

28. A pharmaceutical composition which comprises an antagonist against a receptor for the peptide, precursor or salt claimed in Claim 1 as obtained by using the screening method claimed in Claim 22 or 23 or the screening kit claimed in Claim 24.

29. A pharmaceutical composition as claimed in Claim 28 which is an agent for the treatment or prevention of dwarfism, agalactia/hypogalactia, or diabetes, a hormone secretion promoter, or a gastrointestinal function modulator.

30. A method of (1) treating mammals for or protecting mammals from hormone-producing tumors, acromegaly, gigantism, dementia or gastric ulcer, (2) inhibiting hormone secretion or tumor growth in

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222

mammals, or (3) modulating neural activity or sleep in mammals which comprises administering an effective amount of the peptide, precursor or salt claimed in Claim 1 to mammals.

31. A method of (1) treating mammals for or protecting mammals from hormone-producing tumors, acromegaly, gigantism, dementia or gastric ulcer, (2) inhibiting hormone secretion or tumor growth in mammals, or (3) modulating neural activity or sleep in mammals which comprises administering an effective amount of the DNA claimed in Claim 9 to mammals.

32. Use of the peptide, precursor or salt claimed in Claim 1 in the production of an agent for the treatment or prevention of hormone-producing tumors, acromegaly, gigantism, dementia or gastric ulcer, a hormone secretion inhibitor, a tumor growth inhibitor, or a neural activity or sleep modulator.

33. Use of the DNA claimed in Claim 9 in the production of an agent for the treatment or prevention of hormone-producing tumors, acromegaly, gigantism, dementia or gastric ulcer, a hormone secretion inhibitor, a tumor growth inhibitor, or a neural activity or sleep modulator.

34. A method of producing the peptide, precursor or salt claimed in Claim 1 which comprises subjecting an amino terminus-constituting amino acid or peptide and a carboxyl terminus-constituting amino acid or peptide to condensation, optionally followed by intramolecular disulfide bond formation.

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